

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION

Project Title: Boquillas Ranch - 16 Pipeline

Project No. 10-304

Region/GMU: 10

HPC: Prescott HPC

Project Type: Pipeline/Tank Wildlife and Livestock Water Project

Project Description:

This project would fund the replacement of approximately 9 miles of existing pipeline with 3 inch HDPE pipeline, and the repair of a large steel storage tank on the northern portion of the Big Boquillas Ranch in Game Management Unit 10. The project would originate at Camp 16 and extend roughly 9 miles south. The new and improved pipe would carry water to # 3 and Bishop pastures. This project is a cooperative effort by the Department, Navajo Nation and the Cholla Livestock Company to create a more dependable water source that will service approximately 72,000 acres on the Big Boquillas Ranch. The creation of this water is designed to allow for better management of elk, pronghorn, mule deer and livestock in the area.

Wildlife Species to Benefit: Elk, Pronghorn and Mule Deer

Possible Funding Partners:

Implementation Schedule:

Beginning: Spring 2011

Completed: Spring 2012

NEPA Compliance: (if applicable)

Completed: Yes _____ No _____

Projected Completion Date:

PROJECT FUNDING

SBG Funds Requested: \$ 79,568.00

Cost Share Funds: \$ 89,281.20

Total Project Costs: \$ 168,849.20

PARTICIPANT INFORMATION

Applicant: Darren G. Tucker, Wildlife Manager
Arizona Game and Fish Department – Prescott
Ben Shelby, Wildlife Manager, Arizona Game
and Fish Department - Seligman

Telephone: 928-636-9130 (Darren) 928-422-4944
(Ben)

Address:

Arizona Game and Fish Department
5325 North Stockton Hill Road
Kingman, Arizona, 86409

AGFD Contact and Phone No.

(If applicant is not AGFD personnel)

Coordinated with:

Gloria M. Tom, Director
Navajo Nation – Department of Fish and Wildlife
PO Box 1480
Window Rock, Arizona 86515
(928) 871-6451

Date:

<p>Jeff Cole Navajo Nation – Department of Fish and Wildlife PO Box 1480 Window Rock, Arizona 86515 (928) 871-6595</p> <p>Bob Posey, Regional Supervisor Arizona Game and Fish Department – Region III Kingman 5325 North Stockton Hill Road Kingman, Arizona, 86409 (928) 692-7700</p> <p>Gary Wilson, General Manager Cholla Livestock LLC 1401 North 24th Street Phoenix, Arizona 85008 (602) 220-9820</p> <p>Chris Lowman, Range Resource Area Manager Arizona State Land Department 809 C Gail Gardner Way Prescott, AZ 86305 (928) 778-9567 ext. 3</p>	
Applicant's signature: Darren G. Tucker, AGFD	Date: September 1, 2010

SEND COMPLETED APPLICATIONS TO:
Game Branch
AZ Game and Fish Dept.
5000 W. Carefree Highway
Phoenix, AZ 85086

WAS PROJECT PRESENTED TO THE LOCAL HPC? **YES** ____ **NO** **X**____

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? IF SO WAS IT FUNDED?
No

NEED STATEMENT/PROBLEM ANALYSIS:

Game Management Unit 10 consists of approximately 2300 square miles of predominately private and state (Arizona State Land Department) lands. The Big Boquillas Ranch consists of approximately 1150 square miles of private and state land within Game Management Unit 10. The ranch makes up a very large percentage of the management unit and provides much recreation to the state's sportsmen. The ranch is a valuable asset to Arizona Conservationists and a popular destination for big game hunters in the state.

Managed as an alternative elk management unit, Game Management Unit 10 routinely produces large

antlered bulls and is a frequently the preferred unit for special big game tag holders as well as those lucky enough to draw a hunt permit in the annual draw. The unit also produces abundant pronghorn and mule deer hunting opportunities. These species all occupy the project area. Though elk, pronghorn and mule deer are the species that most frequent the project area, there are nongame and furbearer benefits that would be provided by the project as well.

Much of the wildlife in the Unit relies upon water resources provided by livestock operators. On the Boquillas Ranch an extensive system of wells and pipelines provide water to livestock and wildlife throughout much of the ranch. In spite of the expansive water system, there remain portions of the ranch that are not reliably watered. This circumstance can lead to large areas of the ranch that are difficult to manage and less frequented by wildlife.

Last cycle, the Boquillas Ranch - Tank Car Pipeline project, was funded through the HPC process. This cooperative project between Cholla Livestock LLC and the Arizona Game and Fish Department (Department) resulted in the construction of approximately nine miles of pipeline and the installation of a new 50,000 gallon storage tank and drinker. Because of this, over 20,000 acres of the Ranch can now count on permanent water. While similar in nature, this project is designed to provide reliable water to a much larger area in the northern portion of the Boquillas Ranch near Camp 16. Though other water resources may be present in the area, many of them are ephemeral in nature.

This 16 pipeline was installed in 1962 and is made up primarily of 12 gauge pipe instead of 10 gauge used elsewhere in the system. Due to its age and lesser quality it has become increasingly unreliable to operate. In fact, many places along this pipeline are so thin that the earth around the pipe is actually providing the structural integrity. At present even a slight variation in pressure within the line has caused leaks to form. In many instances the leaks will fail to surface for some time. This constitutes a substantial loss in water and a reduced functionality of the downstream storages.

The loss of this portion of the water system would cause a large section of the northern plains to become non-functional for both cattle operations and wildlife populations. This area encompasses roughly 72,000 acres and includes the #3 pasture and the Bishop pasture, which includes Camp 16.

On August 24, 2010 Department employees met with representatives from Cholla livestock LLC. The intent of the meeting was to discuss this project and visit the proposed reconstruction site. The group also discussed proactive ways to re-direct hunter access in the area surrounding Camp 16. Representatives from the Navajo Nation are supportive of the Department entering into a partnership with the lessee to develop options to improve the capacity of the landscape to support wildlife and livestock. The 16 Pipeline Project was discussed as a valuable step toward that end.

The water system on the ranch has historically been the fiscal responsibility of the owners and the lessee. The proposed project represents an opportunity for the sportsmen of Arizona and the Department (through the HPC program) to continue as a partner in maintaining that system and partnering in the fiscal responsibility of that venture.

PROJECT OBJECTIVES:

The primary objective of the project is to improve stewardship on the Boquillas Ranch by more effectively distributing water so that livestock and wildlife resources can be better managed. To accomplish this goal, an existing water asset will be replaced and improved. Approximately nine miles of existing pipeline will be replaced and a large steel storage tank will be repaired. This will provide reliable and permanent water to a

remote portion of the ranch in the #3 and Bishop pastures surrounding Camp 16.

An equally important objective is for the Department and sportsmen to build on the partnership with the landowners and lessee in supporting, financially and cooperatively, actions that sustain the management of wildlife and wildlife habitat on the Boquillas Ranch.

It should be noted that the water that is produced by the wells that supply the pipelines on the ranch are run by pumps that require large volumes of diesel fuel. Fuel supplies are paid for by the lessee. The pipeline and extensive array of tanks/drinkers are maintained by the owner and lessee. The lessee also staffs a full time employee to manage the water system day to day activities. The system is not a passive system but requires an individual to travel throughout the ranch checking water levels and filling those waters as appropriate.

PROJECT STRATEGIES:

Project strategies will/may include:

- Ranch personnel will replace roughly nine miles of an existing pipeline with new, larger and higher quality pipe. This project will require a different installation method than the Tank Car Pipeline. An excavator, backhoe, loader and grader will be used to complete the project vs. a more simple ripper/spool combination tool.
- The pipeline will follow the existing footprint and should cause minimal disturbance of new ground.
- Ranch personnel will replace the bottom portion of storage tub 14 located mid-way along the pipeline.

PROJECT LOCATION:

The project location is on the Big Boquillas Ranch in game Management Unit 10.

The project area can be accessed via the Supai Highway going east from Route 66 approximately 45 miles to Camp 16.

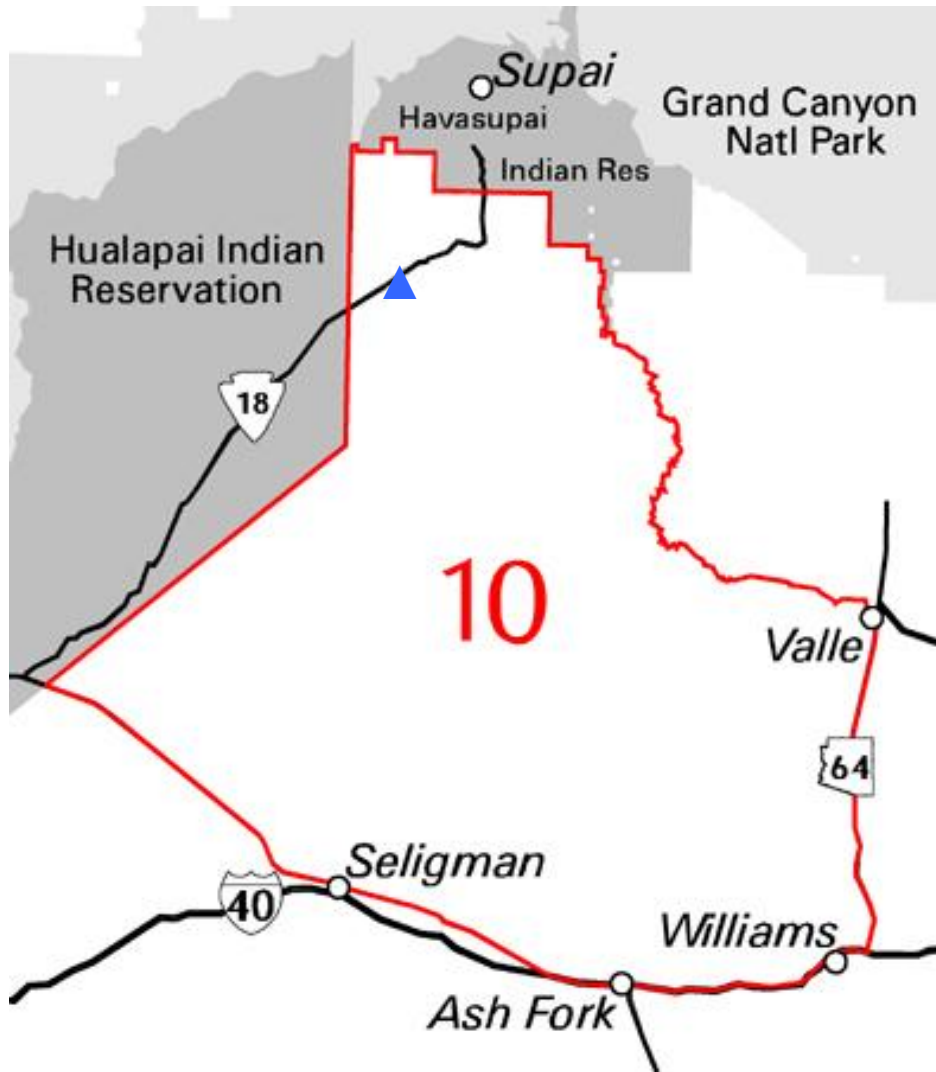
The proposed pipeline will involve the following locations.

T. 30 N., R. 5 W., Sec. 4, 9, 16, 21, 28 and 33

T. 29 N., R. 5 W., Sec. 3, 10, 15 and 14

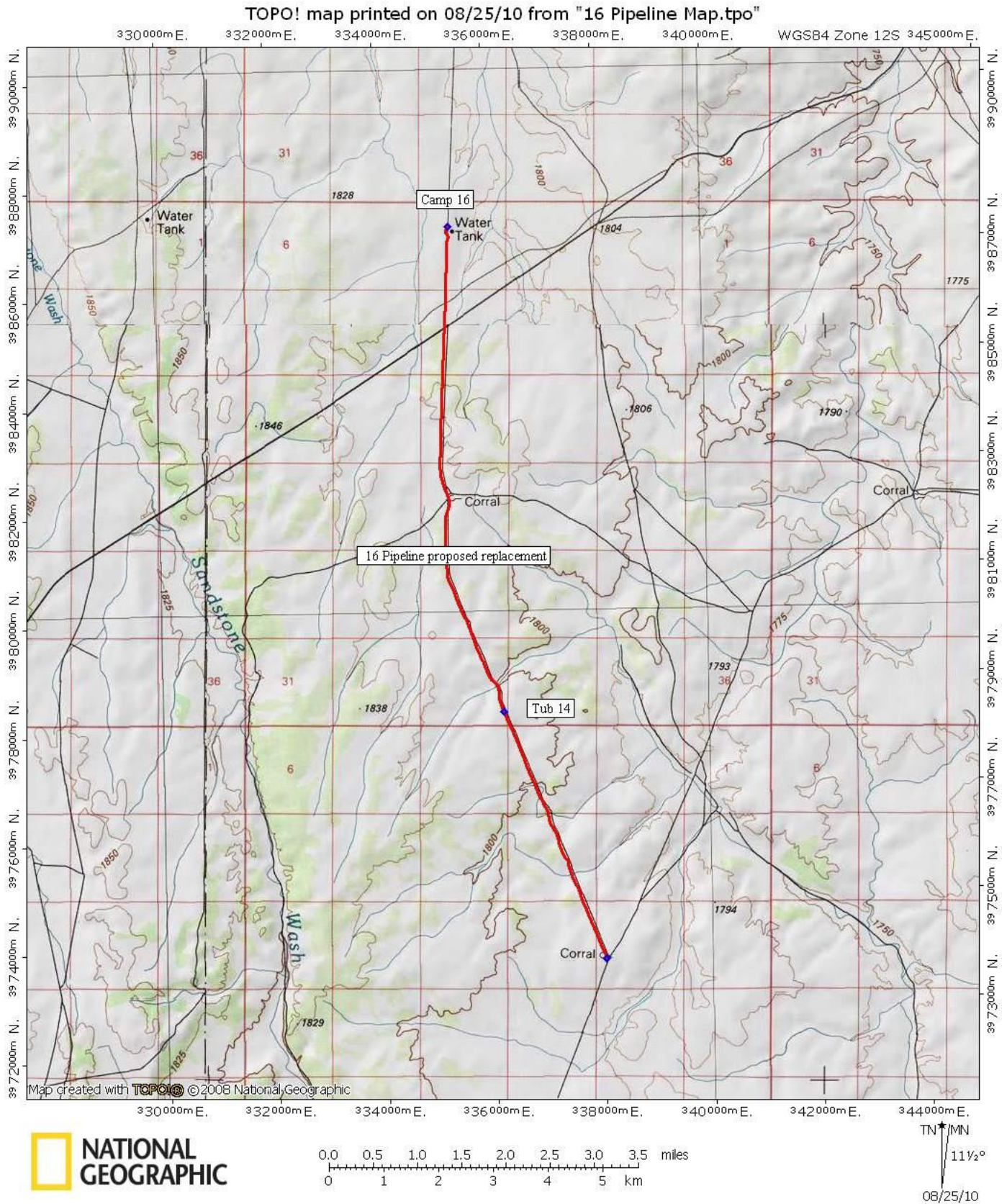
(Maps Below)

Project Area Overview Map (Game Management Unit 10)



▲ Marks the general project location.
Detailed Project Location Map

The entire project area is in the general location of Camp 16. The area is heavily utilized by elk as well as pronghorn antelope and mule deer.



provide landowner's name): The Department is currently working with the Navajo Nation in several planning efforts potentially including an access agreement for the Big Boquillas Ranch. It should be noted that, in spite of the lack of an access agreement with the Navajo Nation for several years, access has been granted to the ranch providing ample access to the resource and a large percentage of the annual hunter days for Game Management Unit 10. As articulated above, rare is the case in Arizona where a single private land holding comprises such a large percentage of a critical game management unit.

The land ownership at the project site is predominantly private land owned by the Navajo Nation, although the proposed section of pipeline does cross one section of State Trust Land.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

HABITAT DESCRIPTION:

The Habitat in the project area is best characterized as grassland/Great Basin Desert Scrub.

The habitat in the project area is dominated by grassland/Great Basin Desertscrub and pinyon/juniper woodlands. Species present include pinyon pine, juniper, cliffrose, algerita, rabbitbrush, four-wing saltbush and various grama grasses.



Photograph 1

Photo taken from the Supai Highway looking north towards Camp 16.



Photograph 2

Photo taken from the Supai Highway looking south.

ITEMIZED USE OF FUNDS:

BUDGET ANALYSIS
BOQUILLAS RANCH – TANK CAR PIPELINE

ANTICIPATED COSTS:

COOPERATOR AND PROJECT COMPONENTS	COST-SHARE DOLLARS	GRANT DOLLARS REQUESTED
ARIZONA GAME AND FISH DEPARTMENT/HPC FUNDING		
• Provide funding for the purchase of 48,000 feet of 3 inch high-density polyethylene (HDPE) pipe. <i>Pipe calculated (lessee's quote) @ 1.60/ft.</i>		\$ 76,800.00
• Provide funding for the purchase of materials to repair storage tub 14. <i>Tank materials calculated at 4 sheets (6'X20') of 1/8" steel @ \$375.00/sheet.</i>		\$ 1,500.00
• Provide funding for purchase of float and valve assembly and other miscellaneous valves and fittings.		\$ 968.00
• Provide funding for purchase of welding and cutting supplies.		\$ 300.00
SUBTOTAL		\$ 79,568.00
CHOLLA LIVESTOCK LLC.		
• †Provide road grader and operator <i>Calculated at 120 hours @100.00/hour</i>	\$ 12,000.00	
• †Provide backhoe and operator to complete needed trench work and prepare tank location, etc. <i>Calculated at 240 hours @90.00/hour</i>	\$ 21,600.00	
• †Excavator and operator to complete needed trench work. <i>Calculated at 300 hours @ 120/hour.</i>	\$ 36,000.00	
• †Dump truck and operator. <i>Calculated at 120 hours @60/hour</i>	\$ 7,200.00	
• †Loader and operator. <i>Calculated at 60 hours @100/hour</i>	\$ 6,000.00	
• †Provide two men and welding equipment to construct steel tank repair. <i>Calculated at 40 hours each at \$65.00/hour</i>	\$ 5,200.00	
• *Provide two laborers. <i>Calculated at 40 hours each @14.14/hour</i>		

\$ 1,131.20

* Cost figures provided by AZGFD Development Branch, Land Owner Relations Program

† Equipment/operator cost figures provided by Cholla Livestock LLC

SUBTOTAL \$ 89,131.20

NAVAJO NATION – DIVISION OF NATURAL RESOURCES

- Provide project oversight as land owner conservation partner. -----
- Submit application to Arizona State Land Department to place improvement upon state land. \$ 150.00
- Note: Since the Navajo Nation has owned the Big Boquillas Ranch, access to sportsmen has been provided each year. This past access, though without a value placed on it in this document, has been greatly valued by the Arizona Game and Fish department and the sportsmen of the state. The Department is working closely with the Navajo Nation as they develop management plans for the Big Boquillas Ranch.

TOTALS: \$ 89,281.20 \$ 79,568.00

Project Total = \$168,849.20

Cost Share Discussion:

The extensive pipeline system on the Boquillas Ranch requires a substantial annual expense to fuel and maintain pumps and to support maintenance personnel and operations assistance. The ranch lessee annually incurs a large expense in operations associated with supplying water to the ranch. A large effort is underway to clean earthen tanks on the ranch as well. Maintenance of these dirt tanks results in a considerable expense for the lessee. Though the assets involved benefit cattle, they are also critical elements of infrastructure in the support of wildlife resources on the ranch. Additionally, the lessee spends a considerable amount of money on road maintenance throughout the Boquillas Ranch. Below is a table that outlines the costs associated with these activities.

**Cholla Livestock LLC
Ranch Improvements and Repairs**

Year	Troughs	Pumps/Wells	Water Lines	Water Tanks	Roads	Total
2009	\$1,387.68	\$9,641.81	\$37,123.23	\$174,896.37	\$128,000.00	\$351,049.09
2010 (through 7/31/2010)	\$6,800.00	\$2,681.88	\$17,748.55	\$130,613.29	\$128,000.00	\$285,843.72

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

(Detailed project components and costs are available above in the Budget analysis.)

ARIZONA GAME AND FISH DEPARTMENT

- Provide funding to purchase project components including piping, steel for tanks, welding rod and water float/valve assembly.
- Provide coordination and oversight to ensure that required permits are obtained and that the project meets conservation/management goals of partners.
- Monitor project construction and future water availability for wildlife.

CHOLLA LIVESTOCK LLC.

- Provide labor and equipment to prepare project site, install pipeline, construct and install tank, float and valve assemblies
- Provide ongoing monitoring and maintenance of project.

NAVAJO NATION – DIVISION OF NATURAL RESOURCES

- Provide project oversight.
- Submit application to Arizona State Land Department to place improvement upon state land.

AIZONA STATE LAND DEPARTMENT

- Provide guidance.
- Provide permit to place improvement upon state land.

PROJECT MONITORING PLAN:

Monitoring of ongoing construction activities and installation of the pipeline will be conducted by Arizona Game and Fish Department Wildlife Managers. Day to day operation, maintenance and monitoring of the completed project will be conducted by the lessee as part of normal operations. Department Wildlife Managers will periodically check the water as part of normal duties to ensure availability to wildlife.

PROJECT MAINTENANCE:

Project maintenance will be the responsibility of the land owner and the lessee as part of the normal responsibilities of those employees involved.

PROJECT COMPLETION REPORT TO BE FILED BY:

Ben Shelby, Wildlife Manager, Seligman

ATTACHMENTS:

**Attachment 1 Letter of Support from Gloria Tom, Director
Navajo Nation Department of Fish and Wildlife**



JOE SHIRLEY, JR.
PRESIDENT

BEN SHELLEY
VICE-PRESIDENT

September 03, 2010

Larry Voyles, Director
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, AZ 85086

RE: Boquillas Ranch - 16 Pipeline

Director Voyles,

The Navajo Nation and the Arizona Game and Fish Department are working toward conservation goals on the Big Boquillas Ranch. As owners of the Ranch, the Navajo Nation is interested in furthering efforts to reach these goals by periodically improving the Ranch infrastructure. The Navajo Nation is interested in partnering with the Arizona Game and Fish Department and the Cholla Livestock Company in projects that improve stewardship on the ranch.

Please accept this letter of support for the Camp 16 water pipeline/tank project. Livestock are currently managed and supported by a well and pipeline system that distributes reliable water throughout much of the ranch. Elk, mule deer, pronghorn, wild turkey and many other wildlife species benefit from the water distribution system as well. The proposed 16 Pipeline Project would fund the installation of 9 miles of HDPE pipeline, a 50,000 gallon steel tank and a wildlife friendly drinker. The intent of this project is to create more dependable water resources on the Ranch. The pipeline would allow for better management of the livestock and wildlife resources in the area.

The Navajo Nation Department of Fish and Wildlife supports the proposed 16 Pipeline Project. The Navajo Nation is committed to conservation on the Big Boquillas Ranch and our partnership with the Arizona Game and Fish Department. As we work toward our management objectives on the Ranch and our conservation partnership, it is in the best interest of the resource to pursue opportunities such as this. We look forward to exploring additional opportunities in the future. If you have any questions or require additional information, please contact me at (928) 871-7450.

Sincerely,

Gloria M. Tom, Director
Department of Fish and Wildlife

xc: Division of Natural Resources
Department of Agriculture, Tribal Ranches Program